# Learner to Teacher: EFL Student Teachers' Perceptions on Internet-Assisted Language Learning and Teaching

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#### **Abstract**

To meet the challenges of fast-paced globalization and a more demanding high-tech environment of the future, it is imperative to train students for equipping with relevant abilities and competencies, especially in online literacy and communication skills, and assist them to build correct technology attitude and belief. Student teachers' perception plays an important role because they will educate out next generation. The purpose of the study was to explore Taiwan EFL student teachers' perceptions about their learning experiences, beliefs, and self-efficacy on Internet-assisted language learning and teaching. Bandura's social cognitive theory (1986) indicates that people's previous experiences and personal beliefs will influence their behaviors; Davis (1989) expresses that learners' internal attitude and self-efficacy about a technology program will determine their hereafter intentions to use the program or not. For gaining a comprehensive understanding about Taiwan EFL student teachers' perceptions on Internet-assisted language teaching and learning, a quantitative research method was employed in this study. The participants of the study were two classes of 101 senior student teachers taking the EFL courses in Wenzao Ursuline College of Languages in Taiwan during the fall semester of 2007. A questionnaire on student teachers' perceptions toward Internet-assisted language teaching and learning was administered to participants. Data are reported in numbers and percentages of student responses. The major finding indicate that most of EFL student teachers have positive experiences and attitudes toward the use of Internet-assisted language instruction and consider technology to be an important approach in their future teaching careers. However, approximately one fourth of EFL student teachers in this study still do not feel confidence enough and were unsure whether they possess the skills and knowledge of technology to integrate technology into their future EFL classrooms.

#### Introduction

The role of computer technology in English as Foreign Language (EFL) instruction has become more and more important as educators recognize its abilities to create both independent and collaborative learning environments in which EFL students can acquire and practice their target language (Butler-Pascoe, 1997). In fact, with the rapid

development of computer and the Internet, how to integrate technology into curriculum and learning activities become a popular teaching and learning approach in the EFL classroom. Through the use of word processors, presentation software, multimedia, hypermedia, drill and practice programs, and especially the Internet, EFL students can engage in individualized instruction and environment designed to meet their specific needs.

According to August (1995), the Internet is a worldwide collection of computer networks that serves as a conduit for communication and global exchange of information. The Internet is not just a simple network which only connects the hardware devices and computers all over the world; rather, it is a combination and connections of millions of individual networks that allows information passing among them. It provides a platform for people all over the world to share information and communicate with others instantly. The rise of Internet not only creates a virtual world but also eliminates the physical boundaries of countries and facilitates the international communication and cooperation. This characteristic is not only convenient for people to communicate in daily life but also advantageous for learners and teachers in the language classroom. Research findings (Snell, 1999; Lee, 2000; Berg, 2003) indicate that access to the Internet provides language teachers and learners with an abundance of English resources and activities for classroom use. Gitsaki and Taylor (2001) further stated that the advantages of the Internet learning can let students practice English and computer skills at the same time, expose them to rich input of English used in real life situation, enhances students autonomy by allowing students to direct their learning to areas that they are interested in, assist student to communicate with native speakers at any time, and stimulate their learning motivation through various online activities.

However, despite the evolutions of computer and the Internet results in the innovation of the EFL instruction, how to apply computer and the Internet to meet the EFL students' learning needs is still a pending issue in the current EFL instruction. Is the online language learning pedagogy more effective than traditional face-to-face EFL learning approach? Can all EFL students gain the same benefits through the Internet language learning environment? And, what barriers or problems do students face when they try to apply computer technology in their English learning? These questions do still exist today, and educators and researchers are discussing continually how to apply the computer technology into the traditional language learning environments and what kind of role the computer can play in the current language instructions (Resier & Dempsey 2003; & Roblyer, 2003).

As pointed out by Garrett (1991), the use of the computer does not constitute an educational method. Rather, it is a medium in which a variety of teaching approaches, learning strategies, and pedagogical philosophies should be still implemented. It means that no matter how great functions computer technology may have it is still just a supplementary tool. The effectiveness of computer technology and the Internet do not lie in the medium but in how they are put to use. In addition, there has been a prominent shift within the field of language education over the last twenty years with greater emphasis being put on learners and learning rather than on teachers and teaching (Cohen, 1998). It means that the effectiveness of Internet-assisted language learning instruction is also influenced by learners' reactions. According to Bandura's social cognitive theory (1986), people's backgrounds, beliefs, and previous experiences play an important role in their determining behavior; Davis in his Technology Acceptance Model (1989) also expresses

that learners' internal perception about a technology program will determine his or her intention to use the program or not and result out different learning outcomes. Thus, awareness of student teachers' perceptions toward Internet-assisted language instruction is a critical criterion for evaluating and developing current teaching EFL with technology curricula. Student teachers' perceptions toward Internet-assisted language instruction will influence not only the acceptance of this teaching approach, but also future behaviors in their learning and teaching processes. After all, if EFL student teachers do not value the functions of computer technology or reject to participate in the Internet learning activities for assisting their target language learning and teaching, Internet-assisted language instruction is a useless approach to them and they will not apply it in their future teaching classrooms.

There is no doubt that the application of computer and the Internet in EFL pedagogy is a new approach compared with traditional EFL instruction. In this emphasizing autonomous learning era, advanced research from EFL students' perceptions to inspect their perceptions toward learning English with the Internet learning activities will be significant and useful information for EFL teachers to evaluate the effectiveness of the Internet language learning and improve EFL online pedagogy in the future.

## **Purpose of the Study**

The purpose of the study was to explore Taiwan EFL student teachers' perceptions on Internet-assisted language learning activities and online resources in language learning and teaching. The perceptions based on their previous learning experience, their personal belief, and their attitudes and self-efficacy toward integrating computer technology and the Internet in their future language teaching. The following research questions were addressed in the study:

- 1. What are Taiwan EFL student teachers' perceptions for applying Internet-assisted language learning activities to improve their English skills from their previous learning experience?
- 2. What are Taiwan EFL student teachers' beliefs for using the Internet's online resources to enhance their future English teaching?
- 3. What are Taiwan EFL student teachers' self-efficacy toward integrating Internet-assisted language learning resources and activities into their future English teaching?

## Methodology

The focuses of the study placed on Taiwan EFL student teachers' perceptions about using Internet-assisted language learning activities and resources to enhance their English learning and future teaching. Quantitative research method was employed in this study for collecting data. A questionnaire which created by Shin (2007) was administered to participants to investigate the student teachers' perceptions toward Internet-assisted language teaching and learning. The questionnaire consisted of two sections: 1. a demographic section to get participants' background information; 2. a multiple-choice section with

fifteen questions which concerning the student teachers' perceptions when using the Internet to enhance their EFL teaching and learning.

#### **Results and Discussion**

The participants of the study were two classes of 101 senior student teachers taking the EFL courses in Wenzao Ursuline College of Languages in Taiwan during the fall semester of 2007. The age range of the participants was from 21 to 29. Of the 101 surveys sent out, 77 were returned. The return rate was 76.2%. A questionnaire using a Likert scale ranging from 4 (Strongly Disagree) to 1 (Strongly Agree) was administered to the students to assess their responses.

In this section, results from the questionnaires will be presented first. Then, all the data will be discussed respectively in terms. For the purposes of this article, data are reported in numbers and percentages of student responses. The findings of the study include 3 tables. The following is a summary of the findings.

## (1). Experience on Previous Internet-Assisted Language Learning

Table 1. Personal Experiences on Internet-Assisted Language Learning

	Strongly Disagree	Disagree	Agree	Strongly Agree	Mean
1. Through my learning experiences, I was motivated to learn English by the use of the Internet.	0 (0%)	8 (10.4%)	53 (68.8%)	15 (19.5%)	1.91
2. Through my learning experiences, I improved English skills through the use of the Internet.	1 (1.3%)	12 (15.6%)	53 (68.8%)	10 (13.0%)	2.05
3. Through my learning experiences, Internet resources provided me more opportunities for autonomous learning	1 (1.3%)	11 (14.3%)	45 (58.4%)	20 (26.0%)	1.91
4. Through my learning experiences, I improved my communication skills by e-mailing or chatting with native speakers of English on-line.	3 (3.9%)	6 (7.8%)	45 (58.4%)	23 (29.9%)	1.86
5. Through my learning experiences, I was more attentive in Internet-assisted English language teaching classes.	2 (2.6%)	11 (14.3 %)	56 (72.7%)	8 (10.4 %)	2.09

According to Knobloch and Whittington (2003), the previous learning experiences of teachers influence how they teach. From Table1, most EFL student teachers of

Wenzao Ursuline College (92.2%) confirm that the Internet can provide them a rich learning environment through their previous learning experiences. With 81.8% of the respondents scoring 2 and 1 (Agree and Strongly Agree) on the Likert scale, these EFL student teachers are also positive for using the Internet to improve their English skills. Indeed, inspired high development of modern technology, the computer and the Internet already became a part of our daily life in this digital era. From 1997, the Ministry of Education of the Republic of China (Taiwan) began to infuse technology into national curricula. Through the efforts over the past ten years, the data showed that technology education has made a preliminary achievement on guiding students to understand the important of computer technology, and most Taiwan student have experienced the benefits of technology education on their learning process.

Moreover, the ultimate goal of education is to promote learner's autonomy. Autonomous learning has become a hot issue in educational field over the past twenty years, and it is important to cultivate learners' ability to self-direct their learning and live independently or successfully later in the society. According to Kavaliauskiene (2002), successful language learning entails learner motivation, cooperation, and empathy. Internet-assisted language learning activities can transfer a common teacher's role to students, and then encourage students to cooperate, interact, and assess their autonomous learning. Through students' previous learning experiences, 83.1 % EFL student teachers of Wenzao Ursuline College indicated that they paid more attention in Internet-assisted English language teaching classes, and 84.4% EFL student teachers affirmed that the Internet resources provide more opportunities for autonomous learning to them. It means that most EFL students recognized that Internet-assisted language instruction can not only catch EFL students' learning attentions, but also create an autonomous learning environment to them.

On the contrary, more than one sixth of EFL student teachers still doubted the functions and effectiveness of the Internet assisted language instruction in this survey. It may reveal that there is still a learning gap in current EFL teacher education for developing technology proficient teachers. Today, many teacher education programs are seeking ways to provide pre-service language teachers with the skills, knowledge, and attitude necessary to integrate technology into their future language classroom (Horung & Bronack, 2000). However, developing a technology proficient teacher is not an easy task. It involves many complex works, such as striving for funding to purchase technology equipment and software, establishing school technology support system, designing appropriate technology training and curricula, and recruiting professional technology educators.

According Queitzsch (1997), professional technology educators are essential to developing technology proficient student teachers. What curricula and contents the student teachers had and experienced from their teacher will determine what they can and will teach their student in the future. Furthermore, Whetstone and Carr-Chellman (2001) indicate that the more technology experiences that student teachers are provided with during teacher preparation, the less anxiety that they will face during in-service experiences. Therefore, encouraging EFL student teachers exposure to technology learning environment continually will help them to observe educational technology in action and to practice teaching with technology.

## (2). Beliefs on Functions of Internet-Assist Language Instruction

Table2. Personal Teaching Beliefs on Internet-Assisted Language Learning

	Strongly Disagree	Disagree	Agree	Strongly Agree	Mean
6. In my belief, the Internet can provide non-native speakers of English with a rich learning environment.	1 (1.3%)	5 (6.5%)	53 (68.8%)	18 (23.4%)	1.86
7. In my belief, the Internet is a useful tool for helping me achieve my future teaching purpose.	1 (1.3%)	4 (5.2%)	48 (62.3%)	24 (31.2%)	1.77
8. In my belief, Internet resources can replace textbooks.	5 (6.5%)	45 (58.4%)	24 (31.2%)	2 (2.6%)	2.70
9. In my belief, it is easy to find teaching ESL/EFL materials on the Web.	2 (2.6%)	7 (9.1%)	48 (62.3%)	20 (26.0%)	1.88
10. In my belief, ESL/ EFL Websites are useful for teaching English.	0 (0%)	11 (14.3%)	51 (66.2%)	15 (19.5%)	1.95

Teacher beliefs play a critical role in the development of teachers (Smylie, 1988). Smith (1991) indicates that teachers act according to their beliefs. Pajares (1992) defines the beliefs as "attitudes, values, judgments, axioms, opinions, ideology, perceptions, conceptions, conceptual systems, preconceptions, dispositions, implicit theories, explicit theories, personal theories, internal mental processes, action strategies, rule of practice, practical principles, perspectives, repertoires of understanding, and social strategy" (p. 309). Indeed, teacher beliefs filter the perception and interpretation of new knowledge and phenomena, which influences how teachers learn to teach, plan to teach, make instructional decisions, and interact with students (Richardson & Placier, 2001).

Data from Table2 showed that approximately 92.2% of EFL student teachers of Wenzao Ursuline College felt that the Internet can create a rich learning environment to them; 93.5 % EFL student teacher confirm that the Internet is a useful tool for helping them to achieve the future teaching purpose; and 88.3% EFL student teachers believed that ESL/EFL websites are useful for EFL their future teaching. The data reveal that most EFL student teachers recognized the functions of Internet-assisted language instruction and regarded the Internet as an importantly educational tool in their future EFL teaching. In a word, most EFL student teachers of Wenzao Ursuline College have strong teacher beliefs that integrating modern technology into language instruction has become an unavoidable tendency in the ESL and EFL education.

However, there are 14.3 % EFL student teachers who still doubt that ESL/ EFL Websites are useful for teaching English, and 64.9% EFL student teachers insisted that Internet resources cannot replace textbooks. No matter how developments that computer technology and the Internet had made for EFL learning and teaching, they still have their limitations. Gutierrez and his colleagues (2002) express that although Internet resources

provide outstanding information for educational learning, students need to be reminded to be critical of the accuracy and validity of some of the information they may encounter, especially those posted by "amateurs". As we know, some Internet learning resources which may contain controversial material or may be not well organized will influence their effectiveness for EFL teaching and learning. In fact, technology is not a panacea. It is a means used by teachers to improve and enhance instruction (Mandell, Sorge, & Russell, 2002). Teacher should use the computer technology and Internet as "tools" to enhance their teaching.

## (3). Self-Efficacy on Future Internet-Assisted Language Teaching

Table3.

Personal Attitudes on Future Internet Assisted Language Teaching						
	Strongly Disagree	Disagree	Agree	Strongly Agree	Mean	
11. I think I am responsible for the success of Internet assisted English language teaching.	1 (1.3%)	19 (24.7%)	52 (67.5%)	5 (6.5%)	2.20	
12. I think I would like to use Internet assisted language learning materials and activities in my future EFL classroom as much as possible.	2 (2.6%)	13 (16.9%)	49 (63.6%)	13 (16.9%)	2.05	
13. I think I am competent to use Internet- based materials in my future EFL classroom.	1 (1.3%)	19 (24.7%)	51 (66.2%)	5 (6.5%)	2.21	
14. I think I need more technology training to improve my Internet literacy skills.	3 (3.9%)	6 (7.8%)	42 (54.5%)	26 (33.8%)	1.82	
15. I think I have to further learn how to integrate Internet resources into my future EFL classroom curricula.	0 (0%)	15 (19.5%)	56 (72.7%)	6 (7.8%)	2.12	

As shown in Table 3, 80.5% EFL student teachers of Wenzao Ursuline College felt that they would like to use Internet- based materials and activities in their future EFL classroom as much as possible, but only 72.7% of student teachers felt that they are competent now for using Internet materials in their future EFL classroom. 88.3% student teachers felt that they need more technology training to improve their Internet literacy skills, and 80.5% student teachers thought that they have to learn more for how to integrate Internet resources into their future EFL classroom curricula. This data showed that most EFL student teachers though that they did not prepare well enough and lack self-efficacy to apply computer technology in their future EFL classrooms.

In fact, the issue of EFL teachers' preparation for integrating technology into the EFL instruction is not a problem occurs in Taiwan only, the same problem exist in all other countries too. According to United States National Center for Education Statistics'

survey (2004), only 45 percent teachers often used computer technology to enhance their teaching content and only 27% of in-service teachers feel well enough prepared to integrate educational technology into their courses; Shin (2007), an EFL teacher in Korea, also expresses that most EFL teachers in Korea are ill-prepared to utilize technology in their classrooms. Today, although most programs for teacher education provide some computer education for pre-service teachers, many do not have up-to-date equipment, software, appropriate training curriculum, and technology expertise to support them if any technology problem occurs. Under this kind of situation, even thought most pre-service teacher education programs have made substantial progress in preparing future teachers with information technology training during the past twenty years, it still has a long way to go.

In this rapidly changing technological society, all teachers are faced with the challenge of knowing how to use computer technology and the Internet resource to enhance their teaching. Handelzalts and his colleagues (2007) assert that to infuse computer technology into the learning environment will encourage pre-service teachers to direct their own learning to build a two-way relationship between theory and teaching practice. However, EFL schools and educators should realize that even though current student teachers are mandated to take educational computer courses, the value of the courses are limited unless computer technologies are integrated into entire EFL teacher education curricula. In order to train EFL student teachers to use computer technology in their future EFL classroom, the effort should go beyond by only training EFL student teachers the basic computer skills. For helping EFL student teachers to be technology proficient teachers in the future, schools should offer more opportunities and trainings to student teachers in order to expose them in technology environment and give them more practical technology experiences. In the same time, EFL instructors should provide student teachers more technology teaching and learning contents, increase student teachers' technology knowledge, and strengthen student teacher's technology self-efficacy. Only in this way, EFL student teachers can increase their technology learning experiences, fully understand the importance and influence of technology in EFL education, and then prepare well to integrate technology into their future teaching methods.

#### Conclusion

Language learning in the 21st Century presents both unparalleled opportunities and extraordinary challenges, many of which are the direct result of computer technology (Ostendorf, Shriberg, & Stolcke, 2005). Indeed, the traditional EFL pedagogy and modern computer technology are to combine to form a new EFL instructional approach. The computer assisted language programs and the Internet resources have now become the indispensable supplementary of EFL education. Educators recognize that utilizing computer technology can be convenient to create both independent and collaborative learning environments and provide students with language experiences as they move through the various stages of second language acquisition (Rost, 2002; Taylor & Gitsaki, 2003). Through the use of the Internet, word processors, presentation software, multimedia, hypermedia, drill and practice programs, the EFL students can engage in individualized instruction designed to meet their specific needs and participate in

cooperative projects that foster communication with peers in their classrooms and throughout the global community. However, although most of Taiwan EFL student teachers in this study have positive experiences and attitudes toward the use of Internet assisted language instruction and consider technology to be an important approach in their future teaching careers, many of them were still unsure whether they possess the skills and knowledge of technology to integrate technology into their future EFL classrooms. To overcome the problem and help EFL student teachers to be technology proficient teachers in the future, ESL schools and instructors should provide more learning opportunities, create appropriate EFL with technology curricula, construct rich technology environments, and offer professional technology trainings to EFL student teachers. In addition, technology cannot replace traditional teaching approaches, but today's educational system cannot grow and will not succeed without access to computers and the Internet. Therefore, EFL instructors should also train EFL students teachers for equipping with relevant abilities and competencies especially in on-line literacy and communication skills and assist them to build correct technology attitude and belief in order for student teachers can employ computer technology and the Internet to strengthen their EFL teaching in the future.

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